

In the Claims

The status of claims in the case is as follows:

1 1. [Currently amended] A method for executing full
2 character interactive input/output mode communication at the
3 application level of a TCP/IP protocol stack in a half
4 duplex block mode environment requiring a half duplex block
5 mode interface , ~~including~~ between a client workstation and
6 a server, comprising the steps of:

7 operating said client to communicate in said
8 application level over said half duplex block mode
9 interface with a first server application written with
10 half-duplex block mode architecture in half-duplex
11 block mode;

12 operating said client to communicate over said half
13 duplex block mode interface with a second server
14 application requiring full duplex character interactive
15 mode by:

16 receiving a key stroke into a buffer at said

17 client workstation;

18 automatically transferring said keystroke from

19 said client workstation over ~~a 1/2~~ a half duplex

20 block mode interface to a full duplex character

21 interactive input/output server application; and

22 said full duplex character interactive

23 input/output server application processing said

24 keystroke and responding appropriate to context of

25 said full duplex character interactive server

26 application;

27 thereby transferring single key strokes as they are

28 entered at said client workstation even though

29 operating in said half duplex block mode environment in

30 which character sequences are normally transferred.

31 2. [Original] The method of claim 1, said buffer being an

32 auto enter, non-display entity on a display screen.

1 3. [Previously presented] The method of claim 1, said

2 buffer being a non-screen entity accessible to said client

3 workstation.

1 4. [Currently amended] A method for character interactive
2 input/output in a half duplex block mode environment
3 including a client workstation and a server, comprising the
4 steps of:

5 connecting said client workstation ~~to said a first~~
6 server application written to half-duplex block mode
7 architecture;

8 operating said client to communicate a half duplex
9 block mode interface said first server application in
10 half-duplex block mode;

11 connecting said client workstation to a second server
12 application written to full duplex character
13 interactive mode architecture;

14 operating said client to communicate over said half
15 duplex block mode interface with said second server
16 application in full duplex character interactive mode
17 by:

18 defining a workstation display at said client

19 workstation as a 1-byte character input field that
20 has auto-enter and non-displayable attributes
21 operating in said half duplex block mode;

22 receiving a keystroke into said input field;

23 automatically transferring said keystroke from
24 said workstation display to a server application;
25 and

26 said server application processing said keystroke
27 and responding appropriate to context of said
28 server application;

29 thereby transferring single key strokes as they are
30 entered at said client workstation even though
31 operating in said half duplex block mode environment in
32 which character sequences are normally transferred.

1 5. [Previously presented] The method of claim 4, further
2 comprising the steps of:

3 communicating an attention signal from said client

4 workstation; and

5 responsive to said attention signal, communicating said
6 keystroke from said workstation display to said server
7 application.

1 6. [Currently amended] The method of claim 4, said client
2 workstation and server together ~~becoming~~ forming a cascaded
3 client to a targeted application server that requires
4 character dependent input/output in full duplex mode.

1 7. [Previously presented] The method of claim 4, further
2 comprising the step preventing display of said input
3 character on said workstation display.

1 8. [Previously presented] The method of claim 4, further
2 comprising the step of operating said client workstation and
3 providing for translation of said character from EBCDIC to
4 ASCII.

1 9. [Currently amended] A method for character interactive
2 input/output in a half duplex block mode environment,
3 comprising the steps of:

4 connecting a client to a first server application
5 written to half-duplex block mode architecture;

6 operating said client to communicate over a half duplex
7 block mode interface to said first server application
8 in half-duplex block mode;

9 connecting said client to a second server application
10 written to full duplex character interactive mode
11 architecture;

12 operating said client to communicate over said half
13 duplex block mode interface with said second server
14 application in full duplex character interactive mode
15 by:

16 configuring a workstation display device at a
17 client workstation to a one character field; and

18 immediately upon entry of an input character into
19 said one character field, processing said input
20 character by signaling an attention identifier
21 from a client emulator application, and responsive
22 to said attention identifier, retrieving said

23 input character from said one character field;

24 thereby transferring single key strokes as they are
25 entered at said one character field even though
26 operating in said half duplex block mode environment in
27 which character sequences are normally transferred.

1 10. [Previously presented] The method of claim 9, further
2 comprising the step of translating and communicating said
3 input character to a remote server and application for
4 interpretation within the context of said remote
5 application.

1 11. [Currently amended] The method of claim 10, further
2 comprising the step of returning from said remote
3 application to said client workstation a display character
4 for display at said workstation display device.

1 12. [Previously presented] The method of claim 11, said
2 display character selectively comprising an echo character
3 which may be said input character.

1 13. [Currently amended] A method for operating a client
2 application in character interactive input/output mode in a

3 half duplex block mode environment, comprising the steps of:

4 connecting said client application to a first server
5 application written to half-duplex block mode
6 architecture;

7 operating said client application to communicate over a
8 half duplex block mode interface to said first server
9 application in half-duplex block mode;

10 connecting said client application to a second server
11 application written to full duplex character
12 interactive mode architecture;

13 operating said client application to communicate over
14 said half duplex block mode interface with said second
15 server application in full duplex character interactive
16 mode by:

17 responsive to receiving an attention command from
18 a keyboard, retrieving from a one character
19 display buffer configured as an auto-entry
20 non-displayable display a single input character;
21 and

22 translating and communicating said input character
23 to a remote application for interpretation within
24 the context of said remote application;

25 thereby transferring single key strokes as they
26 are entered at said keyboard even though operating
27 in said half duplex block mode environment in
28 which character sequences are normally
29 transferred.

1 14. [Currently amended] A method for operating a display
2 operating in a half duplex block mode environment,
3 comprising the steps of:

4 connecting a client application to a first server
5 application written to half-duplex block mode
6 architecture;

7 operating said client application to communicate over a
8 half duplex block mode interface to said first server
9 application in half-duplex block mode;

10 connecting said client application to a second server

11 application written to full duplex character
12 interactive mode architecture;

13 operating said client application to communicate over
14 said half duplex block mode interface with said second
15 server application in full duplex character interactive
16 mode by:

17 configuring said display with respect to a
18 character entry device as a one character,
19 auto-entry, non- displayable buffer;

20 responsive to entry of an input character into
21 said one character, auto-entry, non-displayable
22 buffer, immediately communicating said input
23 character to a remote application for
24 interpretation;

25 thereby transferring single key strokes as they are
26 entered at said one character, auto-entry, non-
27 displayable buffer even though operating in said half
28 duplex block mode environment in which character
29 sequences are normally transferred.

1 15. [Previously presented] The method of claim 14, further
2 comprising the steps of:

3 receiving from said remote application an echo
4 character selectively not said input character; and
5 displaying said echo character.

1 16. [Currently amended] A system for performing character
2 interactive input/output in a half duplex block mode
3 environment including a client workstation and a server,
4 comprising:

5 said client workstation including a client application
6 selectively connected to a first server application
7 written to half-duplex block mode architecture and to a
8 second server application written to full duplex
9 character interactive mode architecture;

10 said client application for communicating over a half
11 duplex block mode interface to said first server
12 application in half-duplex block mode;

13 said client application for communicating over said

14 half duplex block mode interface with a second server
15 application in full duplex character interactive
16 input/output mode including:

17 a display buffer for receiving a key stroke;

18 ~~a client for~~ said client application automatically
19 transferring said key stroke from said workstation
20 ~~over a~~ over said half duplex block mode interface
21 ~~to a full duplex character interactive~~
22 ~~input/output~~ said second server application;

23 ~~said full duplex character interactive~~ second
24 server application for processing said keystroke
25 and responding appropriate to context of said
26 server application;

27 thereby transferring single key strokes as they
28 are entered at said client workstation even though
29 operating in said half duplex block mode
30 environment in which character sequences are
31 normally transferred.

1 17. [Currently amended] A system including a workstation

2 and a server for character interactive input/output in a
3 half duplex block mode environment, comprising:

4 a network for connecting said workstation to said
5 server;

6 said workstation including a client application;

7 a first server application written to half-duplex block
8 mode architecture;

9 said client application for communicating over a half
10 duplex block mode interface to said first server
11 application in half-duplex block mode;

12 a second server application written to full duplex
13 character interactive mode architecture;

14 said client application for communicating over said
15 half duplex block mode interface with said second
16 server application in full duplex character interactive
17 mode including:

18 a workstation display configured as a 1-byte

19 character input field that has auto-enter and
20 non-displayable attributes;

21 a keyboard for entering a keystroke into said
22 input field;

23 said workstation automatically transferring each
24 said keystroke from said workstation display to a
25 server application; and

26 said server application for processing said
27 keystroke and responding to said workstation with
28 an echo character appropriate to context of said
29 server application for display at said workstation
30 display;

31 thereby transferring single key strokes as they
32 are entered at said workstation even though
33 operating in said half duplex block mode
34 environment in which character sequences are
35 normally transferred.

1 18. [Currently amended] A system for character interactive
2 input/output in a half duplex block mode environment,

comprising:

a first server application written to half-duplex block mode architecture;

a client application for communicating over a half duplex block mode interface to said first server application in half-duplex block mode;

a second server application written to full duplex character interactive mode architecture;

said client application for communicating over said half duplex block mode interface with said second server application in full duplex character interactive mode including:

a workstation display device configured as a one character field;

~~a server, and~~

a client emulator application responsive immediately upon entry of an input character into

20 said one character field, for retrieving and
21 communicating to said server over said half duplex
22 block mode interface said input character from
23 said one character field, and responsive to said
24 server for displaying at said display device an
25 echo character selectively different from said
26 input character;

27 thereby transferring single input characters as they
28 are entered at said one character field even though
29 operating in said half duplex block mode environment in
30 which character sequences are normally transferred.

1 19. [Currently amended] A display for character
2 interactive input/output in a half duplex block mode
3 environment in which client applications at a client
4 workstation selectively communicates with a first server
5 application over a half duplex block mode interface in half
6 duplex block mode and with a second server application in
7 via said half duplex block mode interface in full duplex
8 character interactive mode, said client workstation,
9 comprising:

10 a one character, auto-entry, non-displayable buffer for

11 receiving from an input device an input character for
12 communication to a server application; and

13 an output field for displaying an echo character from
14 said server application;

15 thereby transferring single key strokes as they are
16 entered at said input device even though operating in
17 said half duplex block mode environment in which
18 character sequences are normally transferred.

1 20. [Currently amended] A program storage device readable
2 by a machine, tangibly embodying a program of instructions
3 executable by a machine to perform method steps for
4 character interactive input/output in a half duplex block
5 mode environment including a workstation and a server, said
6 method steps comprising:

7 operating said workstation to communicate a half duplex
8 block mode interface with a first server application
9 written with half-duplex block mode architecture in
10 half-duplex block mode;

11 operating said workstation to communicate over said

12 half duplex block mode interface with a second server
13 application requiring full duplex character interactive
14 mode by:

15 receiving a key stroke into a buffer at said
16 workstation;

17 automatically transferring said key stroke from
18 said workstation to a server application;

19 said server application processing said keystroke
20 and responding appropriate to context of said
21 server application;

22 thereby transferring single key strokes as they
23 are entered at said buffer even though operating
24 in said half duplex block mode environment in
25 which character sequences are normally
26 transferred.

1 21. [Currently amended] A program storage device readable
2 by a machine, tangibly embodying a program of instructions
3 executable by a machine to perform method steps for
4 character interactive input/output in a half duplex block

mode environment including a workstation and a server, said
method steps comprising:

connecting said client workstation to said server over
a half duplex block mode interface;

communicating with said server over said half duplex
block mode interface selectively according to half
duplex block mode and full duplex character interactive
input/output mode;

when communicating with said server in said full duplex
character interactive input/output mode,

defining a workstation display as a 1-byte
character input field that has auto-enter and
non-displayable attributes;

receiving a keystroke into said input field;

automatically transferring said keystroke from
said workstation display to a server application;

said server application processing said keystroke

22 and responding appropriate to context of said
23 server application;

24 thereby transferring single key strokes as they
25 are entered at said client workstation even though
26 operating in said half duplex block mode
27 environment in which character sequences are
28 normally transferred.

1 22. [Currently amended] A program storage device readable
2 by a machine, tangibly embodying a program of instructions
3 executable by a machine to perform method steps for
4 character interactive input/output in a half duplex block
5 mode environment, said method steps comprising the steps of:

6 operating a client to communicate over a half duplex
7 block mode interface with a first server application
8 written with half-duplex block mode architecture in
9 half-duplex block mode;

10 operating said client to communicate over said half
11 duplex block mode interface with a second server
12 application requiring full duplex character interactive
13 mode by:

14 configuring a workstation display device to a one
15 character field; and

16 immediately upon entry of an input character into
17 said one character field, processing said input
18 character by signaling an attention identifier to
19 a client emulator application, and responsive to
20 said attention identifier, retrieving said input
21 character from said one character field;

22 thereby transferring single input characters as
23 they are entered at said one character field even
24 though operating in said half duplex block mode
25 environment in which character sequences are
26 normally transferred.

1 23. [Currently amended] A program storage device readable
2 by a machine, tangibly embodying a program of instructions
3 executable by a machine to perform method steps for
4 operating a client application in character interactive
5 input/output mode in a half duplex block mode environment,
6 said method steps comprising the steps of:

7 operating said client application to communicate over a
8 half duplex block mode interface with a first server
9 application written with half-duplex block mode
10 architecture in half-duplex block mode;

11 operating said client to communicate over said half
12 duplex block mode interface with a second server
13 application requiring full duplex character interactive
14 mode by:

15 responsive to receiving an attention command from
16 a keyboard, retrieving from a one character
17 display buffer configured as an auto-entry
18 non-displayable display a single input character;
19 and

20 translating an communicating said input character
21 to a remote application for interpretation within
22 the context of said remote application;

23 thereby transferring single key strokes as they
24 are entered at said keyboard even though operating
25 in said half duplex block mode environment in
26 which character sequences are normally

27 transferred.

1 24. [Currently amended] A program storage device readable
2 by a machine, tangibly embodying a program of instructions
3 executable by a machine to perform method steps for
4 operating a display in a half duplex block mode environment
5 selectively in half duplex block mode and in full duplex
6 character interactive input/output mode using an application
7 layer half duplex block mode interface, when communicating
8 in said full duplex character interactive input/output mode
9 said method steps comprising the steps of:

10 configuring said display with respect to a character
11 entry device as a one character, auto-entry, non-
12 displayable buffer;

13 responsive to entry of an input character into said one
14 character, auto-entry, non-displayable buffer,
15 immediately communicating said input character
16 to a remote application for interpretation;

17 thereby transferring single characters as they are
18 entered at said character entry device even though
19 operating in said half duplex block mode environment in

20 which character sequences are normally transferred.

1 25. [Currently amended] A computer program product ~~or~~
2 ~~computer program element~~ for operating a display in a half
3 duplex block mode environment selectively to communicate in
4 half duplex block mode and full duplex character interactive
5 mode according to method steps executed in full duplex
6 character interactive mode comprising the steps of:

7 configuring said display with respect to a character
8 entry device as a one character, auto-entry, non-
9 displayable buffer; and

10 responsive to entry of an input character into ~~said on~~
11 said one character, auto-entry, non-displayable buffer,
12 immediately communicating said input character
13 to a remote application via an application layer half
14 duplex block mode interface for interpretation;

15 thereby transferring single characters as they are
16 entered at said character entry device even though
17 operating in said half duplex block mode environment in
18 which character sequences are normally transferred.

1 26. [Previously presented] The method of claim 1, said
2 automatically transferring step further comprising the steps
3 of:

4 transferring said key stroke from said client
5 workstation to a Telnet client and thence to said full
6 duplex character interactive (I/O) server application
7 via a Unix server.

1 27. [Previously presented] The method of claim 4, said
2 automatically transferring step further comprising the steps
3 of:

4 transferring said key stroke from said client
5 workstation to a Telnet client and thence to said
6 server application via a Unix server.

1 28. [Canceled]